Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A turbine engine component comprising:
   a) a substrate made of a nickel-base or cobalt-base superalloy; and
   b) a protective coating overlying the substrate, the protective coating formed by depositing at least two platinum group metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium using an electroplating process, wherein the platinum group metals are sequentially deposited, co-deposited using an electroplating step, or deposited using entrapment plating, or combinations thereof.

2. (original) The component of claim 1 wherein the protective coating is at least partially interdiffused with the substrate.

3. (original) The component of claim 1 wherein the protective coating has a thickness of from about 10 to about 120 microns.

4. (original) The component of claim 3 wherein the protective coating has a thickness of from about 10 to about 60 microns.

5. (original) The component of claim 4 wherein the protective coating comprises at least three metals selected from the group consisting of platinum, palladium, rhodium, ruthenium, and iridium.

6. (original) The component of claim 5 wherein the protective coating comprises at least about 50% by weight of platinum or rhodium, or mixtures thereof.

7. (original) The component of claim 1 that is a turbine blade.

8. (original) A turbine engine component comprising:
   a) a substrate made of a nickel-base or cobalt-base superalloy;
   b) a protective coating overlying the substrate, the protective coating formed by depositing at least two platinum group metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium using an electroplating process; and
   c) a ceramic thermal barrier coating overlying the protective coating.

9. (original) The component of claim 8 wherein the protective coating is at least partially interdiffused with the substrate.

10. (original) The component of claim 9 wherein the protective coating has a thickness of from about 10 to about 120 microns.

11. (original) The component of claim 10 wherein the protective coating has a thickness of from about 10 to about 60 microns.

12. (original) The component of claim 10 wherein the protective coating comprises at least about 50% by weight of platinum or rhodium, or mixtures thereof.

13. (original) The component of claim 12 wherein the protective coating comprises at least three metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium.

14. (currently amended) A method for forming a protective coating on a turbine engine component, the method comprising:
   a) providing a substrate made of a nickel-base or cobalt-base superalloy; and
   b) depositing a protective coating on the substrate by electroplating at least two platinum group metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium, wherein the platinum group metals are sequentially deposited,

co-deposited using an electroplating step, or deposited using entrapment plating, or combinations thereof.

15. (original) The method of claim 14 wherein the protective coating is heat treated at a temperature of from about 900°C to about 1200°C for from about 1 to about 8 hours.

16. (original) The method of claim 14 wherein the protective coating has a thickness of from about 10 to about 120 microns.

17. (original) The method of claim 16 wherein the protective coating has a thickness of from about 10 to about 60 microns.

18. (original) The method of claim 16 wherein the protective coating comprises at least about 50% by weight of platinum or rhodium, or mixtures thereof.

19. (original) The method of claim 18 wherein the protective coating comprises at least three metals selected from the group consisting of platinum, palladium, rhodium, ruthenium, and iridium.

20. (original) The method of claim 14 wherein the platinum group metals are sequentially deposited.

21. (original) The method of claim 14 wherein at least two of the platinum group metals are co-deposited using an electroplating step.

22. (original) The method of claim 14 wherein the platinum group metals are deposited using entrapment plating.

23. (original) The method of claim 22 wherein the protective coating comprises up to about 25% by weight of aluminum, zirconium, hafnium, or chromium, or mixtures thereof, deposited using entrapment plating.

24. (original) The method of claim 19 wherein the platinum group metals are sequentially deposited.

25. (original) The method of claim 24 wherein the protective coating is heat treated at a temperature of from about 900°C to about 1200°C for from about 1 to about 8 hours

26. (original) A method for forming a protective coating on a turbine engine component, the method comprising:

a) providing a substrate made of a nickel-base or cobalt-base superalloy;

b) depositing a protective coating on the substrate by electroplating at least two platinum group metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium;

c) heat treating the protective coating and the substrate at a temperature of from about 900°C to about 1200°C for from about 1 to about 8 hours; and

d) forming a ceramic thermal barrier coating over the protective coating.

27. (original) The method of claim 26 wherein the platinum group metals are sequentially deposited.

28. (original) The method of claim 26 wherein the protective coating has a thickness of from about 10 to about 60 microns.

29. (original) The method of claim 26 wherein the protective coating comprises at least three metals selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium.

30. (original) The method of claim 26 wherein the protective coating comprises at least about 50% by weight of platinum or rhodium, or mixtures thereof.